

# RECONSIDERATION OF THE GENERIC PLACEMENT OF *PALICOUREA DOMINGENSIS* (RUBIACEAE: PSYCHOTRIEAE)

Although the Caribbean species sometimes known as "*Palicourea domingensis*" has commonly been treated in *Palicourea*, it lacks the distinguishing features of this genus and is better placed in *Psychotria*.

*Palicourea* Aublet (Rubiaceae: Psychotrieae) is distinguished within its tribe by comparatively long (tubes 5–40 mm long), tubular corollas that are slightly to strongly swollen at the base with a ring of trichomes borne internally, immediately above the basal swelling. Characteristically, the corollas are often also gibbous basally and brightly colored, usually red, yellow, blue, or purple. The thyriform inflorescences are typically open, with well-developed branches, bracts, and pedicels. This genus has been loosely circumscribed by many authors, who have used variously one or a few of these features or characters to separate it from *Psychotria* L.

The species of Psychotrieae now usually called "*Palicourea domingensis*" (Jacq.) DC. is a shrub or small tree of moist forest on soils derived from limestone. It is distributed through most of the Caribbean islands (Cuba, Jamaica, Hispaniola, Puerto Rico, St. Thomas, St. Croix, Tortola, Antigua, St. Kitts, St. Eustatius, Guadeloupe, Martinique, Dominica) and is found on the mainland in Mexico, Belize, Guatemala, and Nicaragua, although it has not been previously reported from these areas (Standley & Williams, 1975).

This species is characterized by salverform corollas with tubes 5–15 mm long. The corollas are predominantly white, although often tinged with rose or purple. Their tubes are glabrous externally and internally, and are not at all swollen or asymmetrical at the base, although the tube may be curved somewhat through its length. The inflorescences are thyriform, with the flowers subsessile in glomerulate groups of three. The inflorescence bracts are poorly developed or lacking.

Thus, "*Palicourea domingensis*" lacks the distinctive floral features and the common inflorescence characters of *Palicourea*. It has been placed in *Palicourea* by most authors apparently based on its relatively long, tubular, often rosy corollas, combined with an inconsistent circum-

scription of *Palicourea* and a respect for previous practice.

This species is better placed in *Psychotria* subg. *Heteropsychotria* Steyerem., which is closely related to *Palicourea*. The floral features of *Psychotria domingensis* are similar to those of other species of *Psychotria*, and the inflorescence characters described above that are rare or lacking in *Palicourea* are common conditions in this subgenus. This relationship was recognized previously by Standley when he described this same species from Nicaragua under the synonym *Psychotria mombachensis* Standley. Although the corollas of *Psychotria* are described in most treatments as comparatively short, and typically do have tubes 5 mm long or shorter, long corollas occur in the genus as well, as in *Psychotria chiapensis* Standley which has corollas with tubes 30–50 mm long. In fact, within subg. *Heteropsychotria*, *Psychotria domingensis* is similar in several characters to *Psychotria chiapensis* and to *Psychotria gardenioides* (Scheidw.) Standley: these species share glomerulate, subsessile flowers, sharply ridged pyrenes, and salverform, white or rosy corollas with internally glabrous tubes 20 mm long or longer. (The last two species differ from *Psychotria domingensis* in their longer corolla tubes and well-developed inflorescence bracts.)

Therefore, "*Palicourea domingensis*" seems better classified in *Psychotria*. In this case, the correct name of this species is *Psychotria domingensis* Jacq. A complete list of synonymy and citations of specimens from Central America are presented below.

## NOMENCLATURE

***Psychotria domingensis* Jacq.**, Enum. Pl. Carib. 16. 1760. *Palicourea domingensis* (Jacq.) DC., Prodr. 4: 529. 1830. TYPE: Santo Domingo.

*Psychotria pavetta* Sw., Prodr. 45. 1788. *Pavetta pentandra* Sw., Fl. Ind. Occ. 1: 233. 1797. *Palicourea pavetta* (Sw.) DC., Prodr. 4: 525. 1830. *Palicourea pentandra* (Sw.) K. Schum., Nat. Pflanzenfam. 4(4): 115. 1891, nom. illeg., Art. 63. TYPE: Jamaica (photographs A, NY).  
*Psychotria tabernaefolia* Poir., Encycl. 5: 704. 1804.



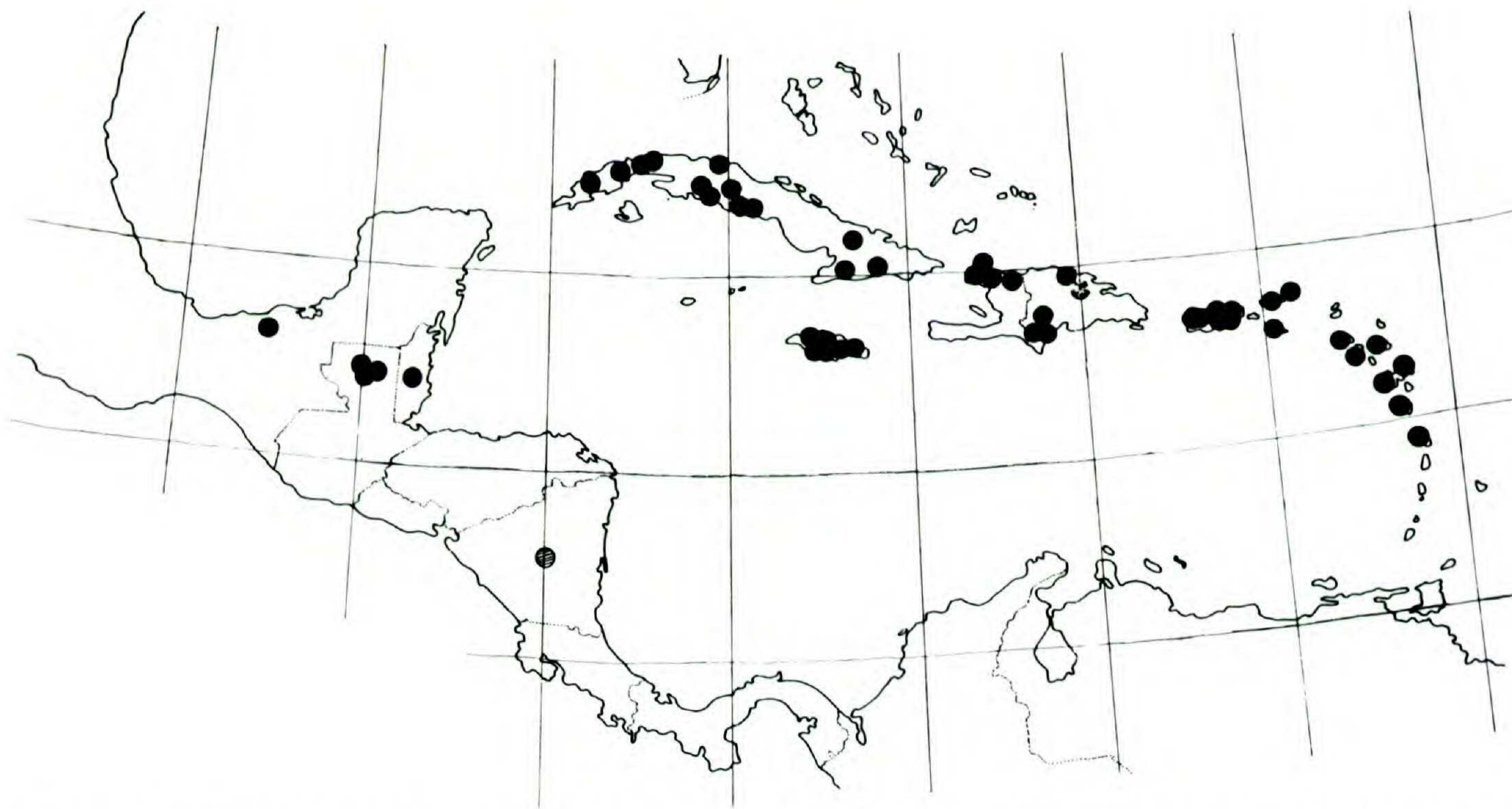


FIGURE 1. Distribution of *Psychotria domingensis* Jacq. in Mexico, Central America, and the West Indies.

*Palicourea tabernaefolia* (Poir.) DC., Prodr. 4: 525. 1830. TYPE: Santo Domingo.

*Psychotria angustifolia* Poir., Encycl. 5: 703. 1804. TYPE: Santo Domingo.

*Psychotria mombachensis* Standl., Publ. Field Colombian Mus., Bot. Ser. 8: 188. 1930. TYPE: Nicaragua: coffee plantation, Mombacho Volcano, 600–750 m, Maxon, Harvey & Valentine 7818 (holotype, F).

*Specimens examined from Mexico and Central America.* MEXICO. TABASCO: La Palma, Balancán, Matuda 3236 (NY).

GUATEMALA. PETÉN: Tikal, Contreras 124 (MO), 1413 (TEFH); Dolores, Contreras 2503 (MO); Macanche, Contreras 5847 (DS); Chincila, Contreras 6360 (MO); Isla del Armadillo, Laguna Macanche, Contreras 7191 (MO); Sayaxche Road, km 59, Contreras 7247 (MO, TEFH); Guayacuan, La Pita, Contreras 7477 (MO); Tikal, Contreras 7707 (MO); between Paso Caballo and Carmelita, Cox 2835 (EAP); Tikal, Molina 15750 (EAP).

BELIZE. CAYO: vicinity of La Flor at Río de La Flor, 6 mi. S of San Grano de Oro, 1,700–2,700 ft. [520–820 m], Croat 23739 (MO), Dwyer 10876 (MO); in advanced forest, Lundell 6199 (NY); W of Hummingbird Hwy. 7 mi. S of junction with Western Hwy., N

boundary of Roaring River Estate, 80 m, Spellman & Newey 1669 (MO); 1 mi. S of Belmopan and 0.5 km E of Hummingbird Hwy., 80 m, Spellman & Newey 1915 (MO); 1,700 yd. W of Hummingbird Hwy., 7 mi. S of junction with Western Hwy., 80 m, Spellman & Newey 2010 (MO); TOLEDO: Dwyer 9863 (MO).

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#### LITERATURE CITED

STANDLEY, P. C. & L. O. WILLIAMS. 1975. Rubiaceae. In *Flora of Guatemala*, Part XI. *Fieldiana Bot.* 24(11): 1–274.

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